

MEMORANDUM

To: EEU E-Mail Service List

From: James A. Volz, Chairman
David C. Coen, Board Member
John D. Burke, Board Member

Re: Adoption of Revised Avoided Costs for Energy Efficiency Screening

Date: November 30, 2009

In Docket 5980, the Vermont Public Service Board ("Board") accepted a proposal that relied on the Vermont Department of Public Service ("DPS" or "Department") to propose updates for avoided costs. The Board would then provide an opportunity for other parties to file comments and request a technical workshop before ruling on the proposed changes.

On September 22, 2009, the Department requested that the Board approve updated avoided costs for use in program and measure screening by the Energy Efficiency Utility ("EEU"). Consistent with the process we adopted in Docket 5980, the Board solicited comments from interested persons and conducted a technical workshop on November 3, 2009, to review the Department's analysis.

We have considered the Department's proposal and the parties' statements at the workshop and filings following the workshop.¹ As we explain below, we find the proposal to be reasonable and accept the Department's recommended avoided costs for use in EEU program and measure screening only.

Avoided Costs

The proposed avoided costs were developed by the Avoided-Energy-Supply-Component ("AESC") Study Group in conjunction with other states in the New England

¹The Board received filings on November 10, 2009, from Vermont Energy Investment Corporation ("VEIC"), which is the entity serving as Efficiency Vermont, Vermont Gas Systems, Inc. ("VGS"), and Central Vermont Public Service Corporation ("CVPS").

region.² In recent years, the Department has updated these costs on a biennial basis in line with the regional AESC cycle. The cost projections that the Department asks us to adopt were customized for Vermont based upon the regional avoided-cost analysis. The Department recommended that the Board approve updated energy, capacity, and other fossil-fuel avoided costs. The avoided natural gas costs are located in Appendix D, Table D-5 of the AESC Report.³ The avoided wholesale electricity costs are located in Appendix B, Table One on B-3 of the AESC Report. The specific columns that the Department proposes for adoption are columns labeled u, v, w, x, and y on page B-4. Avoided costs for fossil fuels and cord wood are contained in Appendix E at Tables E-1 and E-2. The Department filed separate comments indicating that the price of wood pellets should be set at twice that of cord wood, in line with the text and comments contained in the AESC report and at the workshop.⁴

Other Potential Adjustments and Adders

The Department did not recommend any changes to the avoided transmission and distribution component, the line-loss multipliers, or the costing period definitions presently in use for efficiency screening. The Department did not propose to adopt the externality adder for carbon dioxide emissions that is included in the AESC study; rather, the Department proposed that the current environmental adder continue to be used.

The Department also did not propose to adopt the Demand Reduction Induced Price Effect ("DRIPE") adjustment shown in the AESC study. A question was raised at the workshop whether, indeed, the Board should include DRIPE in the avoided-cost determinations. The initial response from the Department was that DRIPE should be ineligible for inclusion under the existing economic test used for screening in Vermont (i.e., under the societal test). Board staff indicated that the issue of whether to include the DRIPE adjustment merits a separate discussion and they would propose a workshop to further explore the topic.

Only VEIC, VGS, and CVPS filed written comments on the Department's proposal. No objections were raised to the proposed updates to the avoided costs. Attendees at the workshop asked questions about the AESC study that was the basis for the proposed avoided costs. Formal responses to questions raised were shared with the participants and the EEU e-mail service list on November 9, 2009.⁵

Questions were also raised about whether to revisit or reconsider the avoided-cost implications of environmental externalities and adjustments for local transmission and

²The AESC study, prepared by Synapse Energy Economics, Inc., is entitled "Avoided Energy Supply Costs in New England: 2009 Final Report" and is available on the Department's web site at: <http://publicservice.vermont.gov/pub/aescstudy.html>.

³The Department is not requesting that these be adopted for VGS, but rather that these costs be used by the EEU for purposes of energy efficiency program and measure screening for its activities.

⁴E-mail communications from Dave Lamont, DPS, November 13, 2009.

⁵The response by Synapse is available at the Board's web site at <http://psb.vermont.gov/docketsandprojects/eeu/avoidedcosts/2009>.

distribution ("T&D") infrastructure development. In its written comments, VEIC expressed support for a process to revisit these issues.⁶ Board staff have made a similar preliminary recommendation as a separate matter in the context of their review of cost-effectiveness screening of heating and process fuels.⁷

Application to Vermont Gas Systems, Inc. ("VGS")

In 2007, the Board expressed concern that it may be confusing to customers if the cost-effectiveness of possible energy efficiency measures differs, depending on which entity performs the analysis. VGS and Efficiency Vermont still do not currently use the same avoided natural-gas costs and the Department's proposal maintains this path. VGS points out that there is a significant structural difference between the avoided costs proposed in the AESC study and that of the VGS screening tool.⁸ VGS asserts that adopting the AESC avoided costs at this time would "unnecessarily disrupt VGS' programs." The structural differences between the DPS proposal and VGS' current estimates appear to relate to an adjustment related to pipeline expansion and propane peaking requirements. These adjustments seem to present a relatively straight-forward adjustment that could be made to the DPS AESC estimates of avoided natural gas costs. Nevertheless, the Department has not proposed requiring VGS to use the same avoided natural gas costs as the EEU at this time.

Conclusions

We accept the Department's recommendations and adopt its proposed updated avoided energy and capacity costs, as well as the end-use avoided costs for natural gas and other fuels, for screening programs and measures by Efficiency Vermont and the City of Burlington Electric Department. (A copy of these avoided capacity and energy costs is attached.) The avoided costs we adopt here include the capacity and energy prices included in Appendices B, D, and E, as described above.

We also accept the Department's proposal to continue to rely upon the pre-existing environmental adder that was adopted in Docket 5980. The issues surrounding the adder are complex and deserve more focus in a separate review process. The issues are also closely linked to current federal efforts to control carbon, regional efforts through RGGI, and our evolving understanding of environmental science and estimates of costs from greenhouse gas emissions, particularly carbon. However, in light of the changes that have taken place between determinations in Docket 5980 and the present, we believe that it is now time to revisit the issue. We intend to announce an initial workshop to explore the issue further. The scope of that initial workshop will include a discussion of externalities and other issues identified below.

⁶VEIC Comments, November 10, 2009.

⁷Comments are due on the preliminary recommendations of J. Riley Allen in the Cost-Effectiveness Screening of Heating and Process fuels proceeding on December 4, 2009. The web page devoted to this proceeding is at <http://psb.vermont.gov/docketsandprojects/eeu/screening>.

⁸See, VGS Comments, November 10, 2009.

At this time, we do not adopt the DRIPE adjustment or the carbon dioxide externality adder contained in the AESC report; there is no pending proposal to adopt them, and adopting or modifying these adders would require significantly more foundation than could be established in the context of this expedited review.

Next Steps

We ask the EEU to work with the Department to incorporate the proposed avoided costs into the 2010 EEU screening tool in time for the coming year.

VEIC should work with the DPS, the Contract Administrator and Board staff to recalculate the Total Resource Benefits goal, as provided in VEIC's contract with the Board.

On a preliminary basis, we believe that it is time to revisit and potentially reset the externalities adjustments in the screening tool. However, we will also consider comments of the Department and those that deliver programs as to whether such a review is likely to result in changes that would have a material impact on program activities in coming years. We will include discussion of externalities within the scope of an initial exploratory workshop that may lead to a more structured investigation.

We also direct Board staff to include in the scope of this same workshop a discussion of the merits of including DRIPE in the avoided costs and whether the screening tool should be changed in some way to more fully recognize the localized T&D benefits of targeted program investments.

The Department has updated the avoided costs on a biennial basis in recent years. This appears to be a reasonable interval for reconsidering avoided costs. We encourage the Department to continue on this path.

While the Board is not adopting the natural-gas avoided costs contained in the AESC study for application in VGS's program or measure screening, we intend to establish an integrated set of avoided natural gas costs for purposes of program screening for both the EEU and VGS on a going-forward basis. VGS should work with the Department and the EEU to address any potential structural concerns in any future analysis of avoided costs.⁹

⁹As noted above, the Board had understood that these discussions were to have taken place in time for the updates to the 2009 avoided cost determinations. We intend to schedule shortly a separate workshop with VGS and Department staff with a goal of resolving any impediments to the adoption of a single set of avoided costs across all utilities and programs under our jurisdiction.